

---

# High Power Test Areas

Meson & New Muon  
Test Facility  
Status



The Phoenix.

Paul C. Czarapata 11/14/05

# Why Meson

---

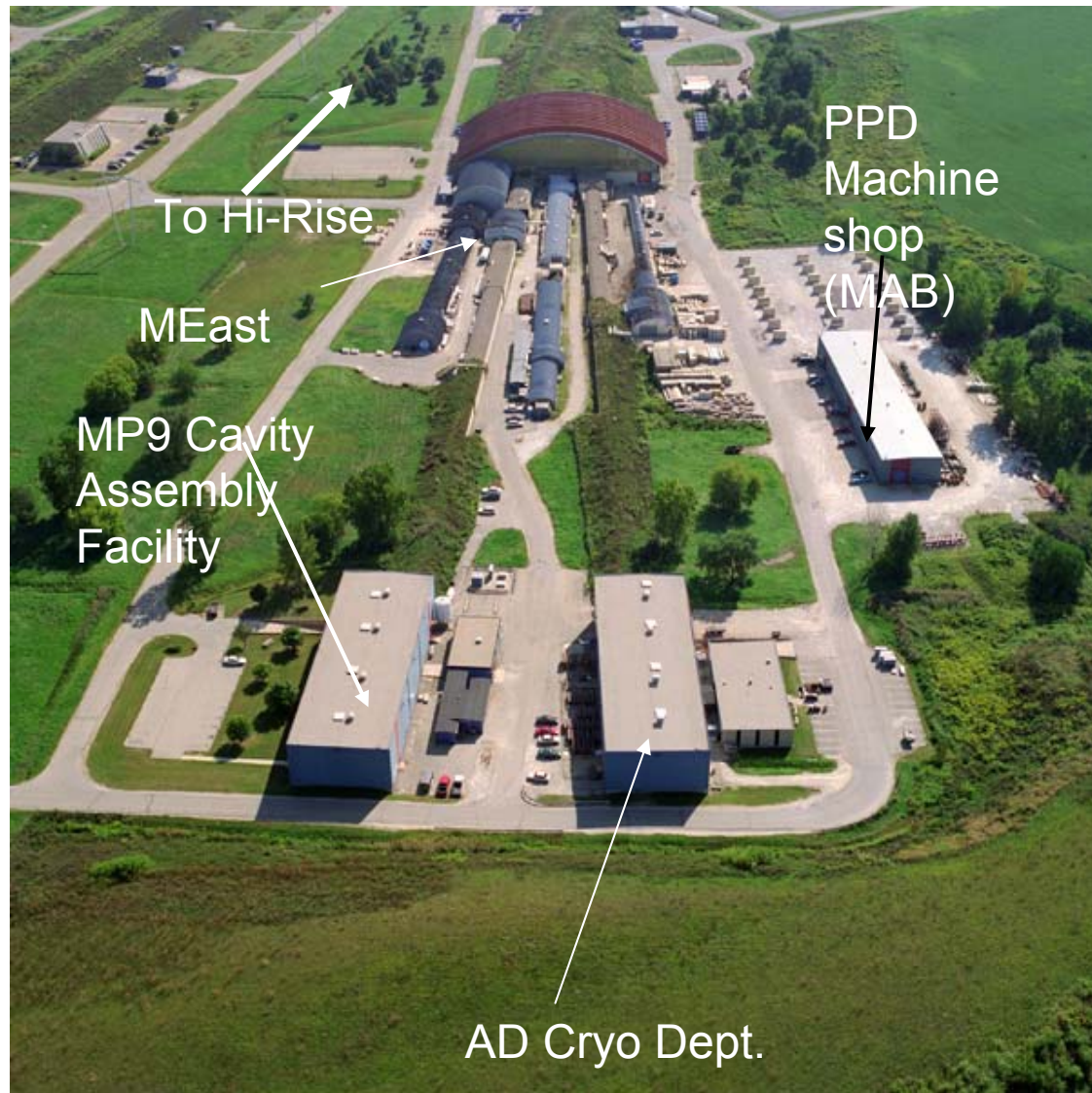
- Advantages

- Available cryogenics
- Available space, including a long straight beam line
- Available power

- Disadvantages

- We had to clean up the Meson East area (old fixed target experiment) and do some infrastructure maintenance.
- The Meson area had the remnants of E-605 in the MEast beam line
- The MPolarized beam line had an old target station with tons of steel shielding and many old magnets and miscellaneous left over equipment.

# Orientation





# What were we facing?



# And a Bone yard





# Meson Now

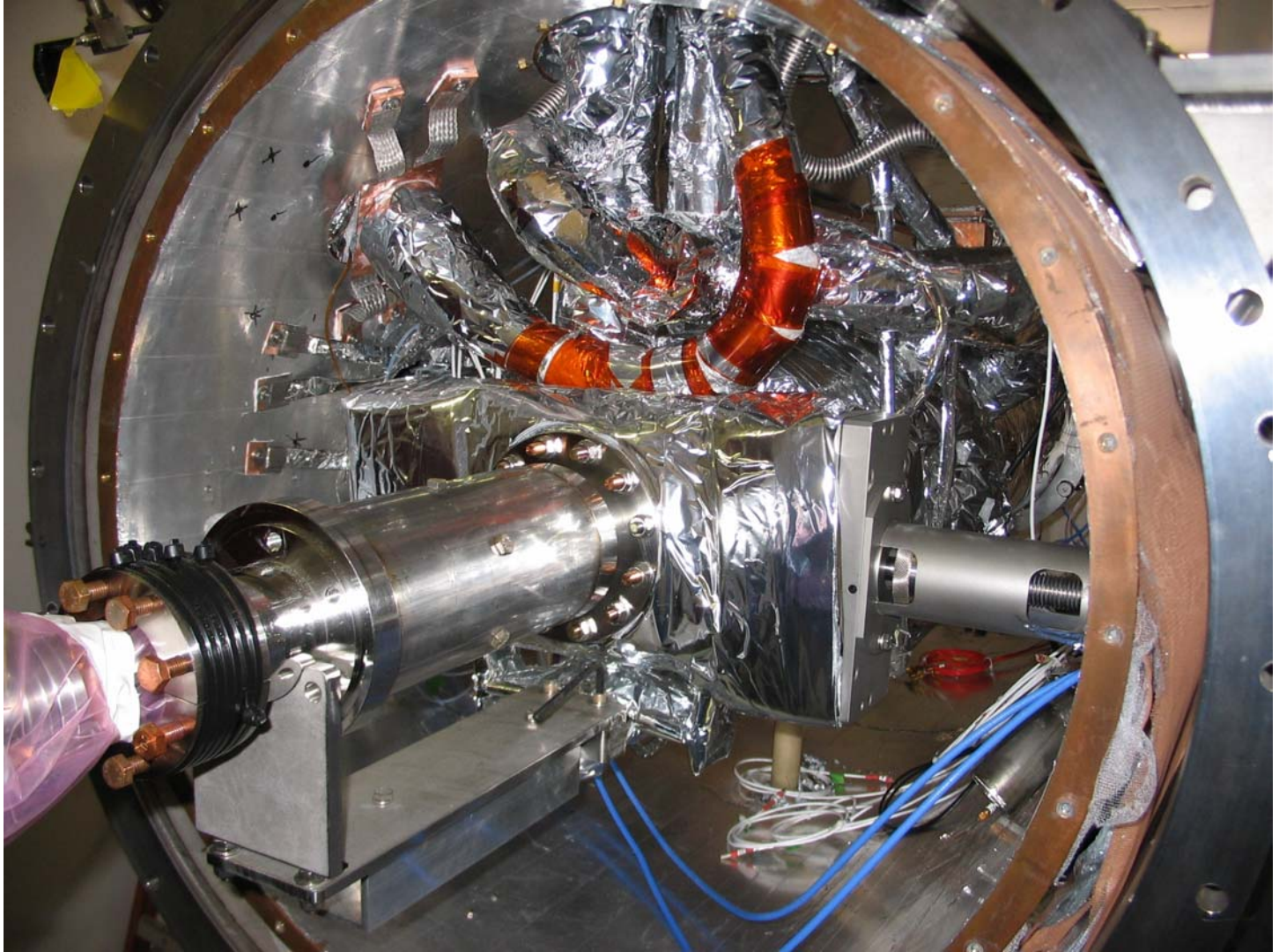


# Cap. Cavity II Cave





# Inside of CCII

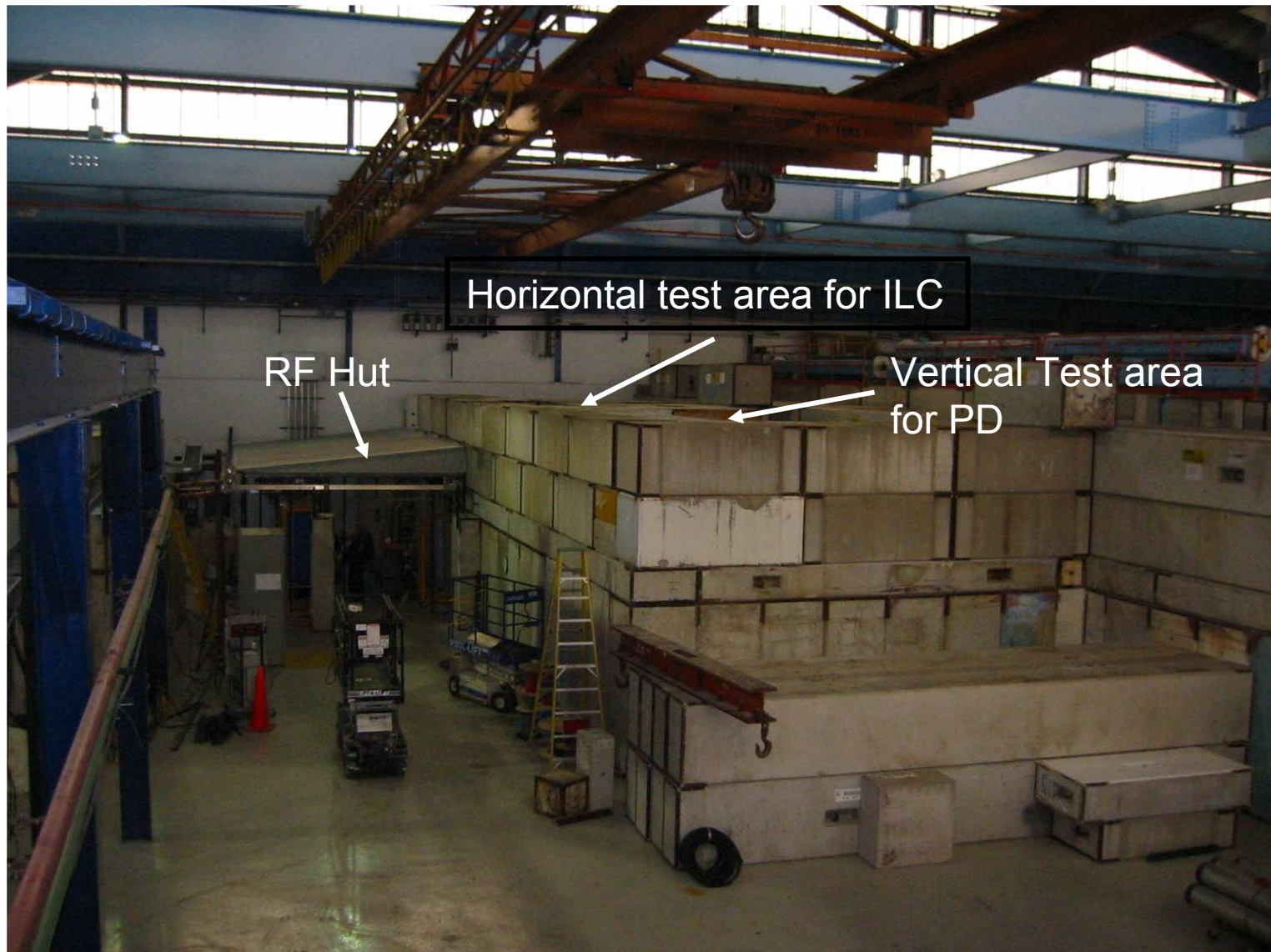




# Cryo is cold



# RF Hut & Power proceeding





# Chilled water skid





# New Muon & Vicinity

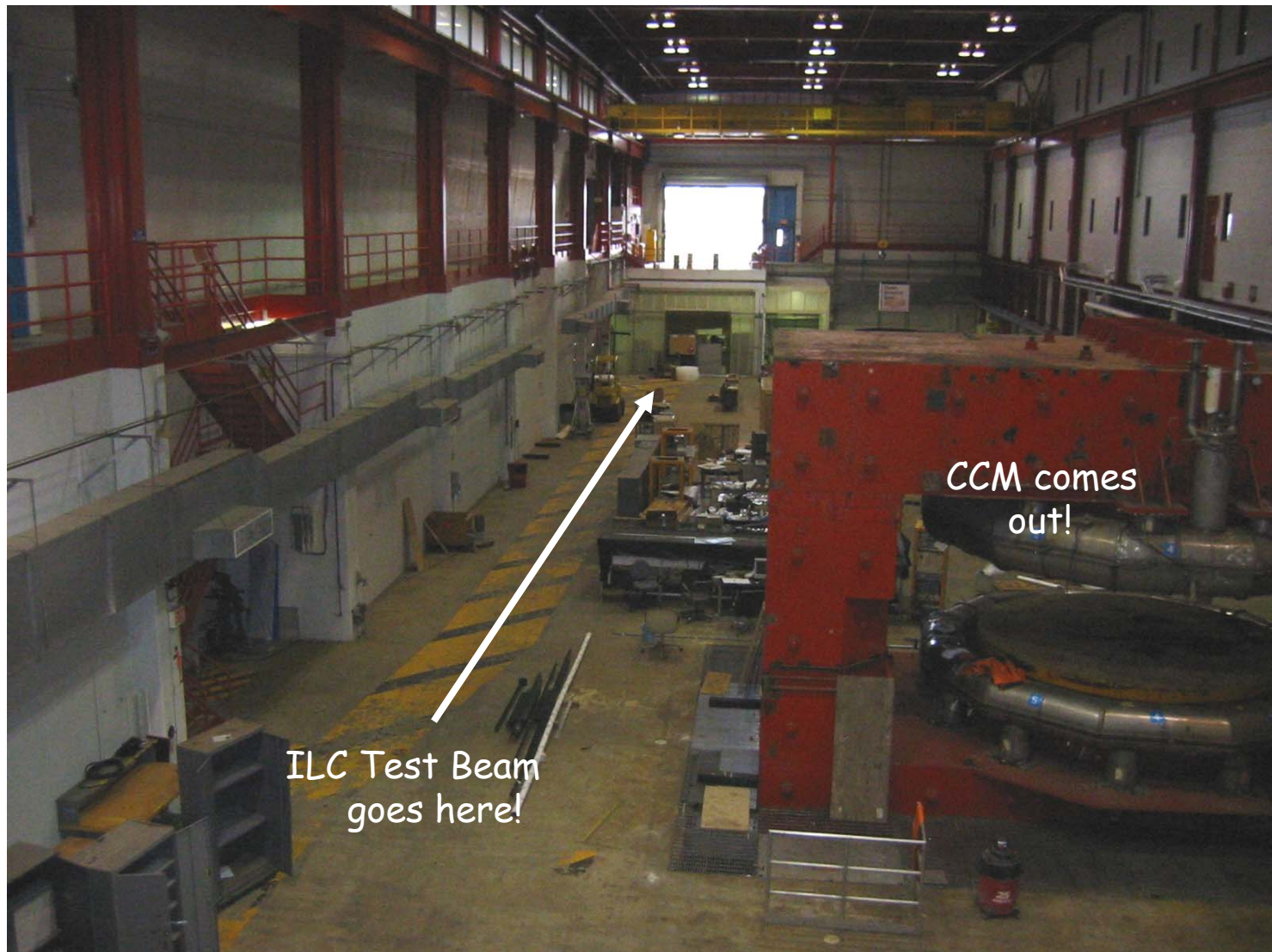




# NM-ILCTA Chicago Cyclotron Magnet



# Where ILC module(s) goes!





# Vacuum System for Meson 1.8K°





# Vacuum system for 1.8K°





# Summary

---

- Started about one year ago
  - Original goal was to get the area ready for the Capture Cavity by "World Series Time" this year
    - The White Sox did a great job of shortening our available time! GO SOX!
  - AREA WAS READY on time.
- Next phase to get CC II cold and powered.
  - The Capture Cavity will be powered with a 200KW 1.3GHz Klystron.
    - Klystron, Modulator, and wave guide in place.
    - LLRF has been working at the AO Photo Injector.
- Cavity should be cold and powered in mid-December.

# From the ashes



Used with permission - Kimberley Petrie